Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application. Please amend the claims as indicated below:

Listing of Claims

1. (Currently Amended) A lithographic process for producing high aspect ratio parts from an epoxy-type negative photoresist, comprising the steps of:[[-]]

(i) irradiating a prebaked masked epoxy-type negative photoresist on a substrate with light at a total energy density of from 18,000 to 35,000 mJ/cm^2, wherein no more than 15% of the energy density is contributed by light having a wavelength of 400nm or less;

(ii) post-baking the exposed photoresist at elevated temperature[[,]]; and

(iii) developing the exposed photoresist in a solvent,

~~wherein no more than 15% of the energy density is contributed by light having a wavelength of 400nm or less~~ whereby a high aspect ratio part is produced.

2. (Original) A process as claimed in claim 1, in which step (i) is a single irradiation step using an appropriate filter to filter out the desired proportion of light below 400nm.

3. (Original) A process as claimed in claim 1, in which step (i) involves multiple exposures, each exposure filtering out a different proportion of light below 400nm.

4. (Currently Amended) A lithographic process for producing high aspect ratio parts from an epoxy-type negative photoresist, comprising the steps of: [[-]]

(i) irradiating a prebaked masked epoxy-type negative photoresist on a substrate with a high pressure mercury lamp that emits ultraviolet (UV) light, wherein at least 20% of the UV light emitted from the mercury lamp having a wavelength of 365nm is filtered out;

(ii) post-baking the exposed photoresist at elevated temperature[[,]]; and

(iii) developing the exposed photoresist in a solvent,; ~~wherein at least 20% of the UV light emitted from the mercury lamp having a wavelength of 365nm is filtered out.~~

5. (Currently Amended) A process as claimed in claim 4, wherein[[,]] the duration of exposure in step (i) is calculated so that the energy density of light at the unmasked surface of the photoresist is from 18,000 to 35,000 mJ/cm^2[[ ]].

6. (Previously Presented) A process as claimed in claim 4, wherein at least 40% of the 365 nm light is filtered out during step (i).

7. (Previously Presented) A process as claimed in claim 4, wherein light below 400nm contributes no more than 15% of the total energy density.

8. (Previously Presented) A process as claimed in claim 7, wherein light below 400nm contributes no more than 10% of the total energy density.

9. (Previously Presented) A process as claimed in claim 1, wherein the photoresist is an octafunctional epoxidised novolac resin.

10. (Currently Amended) A process as claimed in claim 1, wherein the photoresist has a thickness in the range of [[is]] 0.701 to 1.5 mm. ~~thick.~~

11. (Previously Presented) A process as claimed in claim 4, in which step (i) is a single irradiation step using an appropriate filter to filter out the desired proportion of light below 365nm.

12. (Previously Presented) A process as claimed in claim 4 in which step (i) involves multiple exposures, each exposure filtering out a different proportion of light below 365nm.

13. (Original) A process as claimed in claim 12, wherein a four step exposure is adopted with the first exposure using no filter, the last exposure filtering all the 365 nm light and the

second and third exposures filtering 80% and 90% of the 365nm light respectively.

14. (Previously Presented) A process as claimed in claim 1, wherein step.(ii) is carried out at a temperature of at least 60°C.

15. (Previously Presented) A process as claimed in claim 1, wherein the post bake is a two step procedure in which the photoresist is heated to a first temperature and subsequently to a second higher temperature.

16. (Previously Presented) A process as claimed in claim 1, wherein the method includes a step of rinsing the developed photoresist after step (iii) followed by drying.

17. (Currently Amended) A part fabricated using the process of claim 1 or claim 4, wherein the fabricated part comprises an aspect ratio of greater than or equal to 40:1.

18. (Previously Presented) A reciprocating microengine comprising a cylinder, piston and crankshaft, one or more of which are fabricated by the process of claim 1 or claim 4.

19. (New) A process as claimed in claim 1, wherein the high aspect ratio part comprises an aspect ratio of greater than or equal to 40:1.